Docket No. 18973-53 (P00-3165)

DECLARATION, POWER OF ATTORNEY AND PETITION

As the below named inventors, We hereby declare that:

Our residence, post office address and citizenship are as stated below next to our name.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled Method and System for Exclusive Two-Level Caching in a Chip-Multiprocessor the specification of which

\boxtimes	is attached hereto		
	was filed on	as Application Serial No	
	and was amended on	(if applicable).	

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

We hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) or U.S. provisional application(s) for patent or inventor's certificate listed below and have also identified below any foreign application or U.S. provisional application(s) for patent or inventor's certificate having a filing date before that of the application of which priority is claimed.

Prior Foreign/U.S. Provisional Application(s)

				Priority	Claimed
(Number)	(Country)	(Day, month, year filed)		☐ Yes	□ No
(Number)	(Country)	(Day, month, year filed)		□ Yes	□ No
(Number)	(Country)	(Day, month, year filed)		☐ Yes	□ No

We hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

60/210.655	June 9, 2000	Pending
(Application Serial No.)	Filing Date	(Status: Patented, pending, abandoned)
60/210.675	June 10, 2000	Pending
(Application Serial No.)	Filing Date	(Status: Patented, pending, abandoned)

We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint R.P. LANGE, REG. 27,296; T.S. PARK, REG. 26,971; L. BRUCCULERI, REG. 38,834; D. DROZENSKI, REG. 39,177; C.A.S. HAMRICK, REG. 22,586; R.O. GUILLOT, REG. 28,852; J. BOYCE, REG. 40,920; C. CHOU, REG. 41,672; A.B. DIEPENBROCK III, REG. 39,960; M.K. BOSWORTH, REG. 28,186, L. SHERRY, REG. 43,918; L. McROSS, REG. 40,427; T. KHAN, REG. 46,273; L. GUERNSEY REG. 40,008; M. HUGHES, REG. 29,077; R. ROBERTS,

Declaration, Power of Attorney & Petition

REG. 38,597; S. HOWELL, REG. 45,929; R. NADER, P47,260; B. COLEMAN, REG. 39,145; P. HICKMAN, REG. 28,516; B. KENNEDY, REG. 33,407; OPPENHEIMER WOLFF & DONNELLY LLP, 1400 Page Mill Road, Palo Alto, California 94304, (650) 320-4000, as my attorneys with full power of substitution and revocation, to prosecute said application and to transact in connection therewith all business in the Patent and Trademark Office and before competent International Authorities.

Address all telephone calls to Leah Sherry at (650) 320-4000 and address all correspondence to:

Leah Sherry, Esq. OPPENHEIMER WOLFF & DONNELLY LLP

Customer 25696 1400 Page Mill Road Palo Alto, California 94304-1124

Wherefore I pray that Letters Patent be granted to me for the invention or discovery described and claimed in the foregoing specification and claims, and I hereby subscribe my name to the foregoing specification and claims, declaration, power of attorney, and this petition.

Full Name of Sole or First Inventor:	Luiz Andre Barroso			
Home Address:	1980 California Street, #20, Mountain View, CA 94040			
Post Office Address:	Same as above			
Citizenship:	BRAZIL	_		
Inventor's Signature:	mar-	Date:	5-15-	200 1
Full Name of Second Inventor:	Kourosh Gharachorloo			
Home Address:	2260 Camino A Los Cerros, Menlo Park, CA 94025			
Post Office Address:	Same as above			
Citizenship:				
Inventor's Signature:	Round haradarles	Date:	5-15-20	01
Full Name of Third Inventor:	Andreas Nowatzyk	·		
Home Address:	938 Sunbonnet Loop, San Jose, CA 95125			
Post Office Address:	Same as above			
Citizenship:	GERMANY			
Inventor's Signature:		Date:		

- DECLARATION, POWER OF ATTORNEY AND PETITION

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Prior Foreign/U.S. Provisional Application(s)

			Prio	rity C	laimed
(Number)	(Country)	(Day, month, year filed)] es	□ No
(Number)	(Country)	(Day, month, year filed)] es	□ No
(Number)	(Country)	(Day, month, year filed)] es	□ No

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(Application Serial No.)	Filing Date	(Status: Patented, pending, abandoned)
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Declaration, Power of Attorney & Petition

REG. 38,597; S. HOWELL, REG. 45,929; R. NADER, P47,260; B. COLEMAN, REG. 39,145; P. HICKMAN, REG. 28,516; B. KENNEDY, REG. 33,407; OPPENHEIMER WOLFF & DONNELLY LLP, 1400 Page Mill Road, Palo Alto, California 94304, (650) 320-4000, as my attorneys with full power of substitution and revocation, to prosecute said application and to transact in connection therewith all business in the Patent and Trademark Office and before competent International Authorities.

Address all telephone calls to Leah Sherry at (650) 320-4000 and address all correspondence to:

Leah Sherry, Esq. OPPENHEIMER WOLFF & DONNELLY LLP Customer 25696

1400 Page Mill Road Palo Alto, California 94304-1124

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Full Name of Sole or First Inventor:	Luiz Andre Barroso	-
Home Address:	ome Address: 1980 California Street, #20. Mountain View, CA 94040	
Post Office Address:	Same as above	_
Citizenship:	BRAZIL	_
Inventor's Signature:	Date:	
Full Name of Second Inventor:	Kourosh Gharachorioo	_
Home Address:	2260 Camino A Los Cerros, Menlo Park, CA 94025	_
Post Office Address:	Same as above	_
Citizenship:	IRAN	_
Inventor's Signature:	Date:	· .
Full Name of Third Inventor:	Andreas Nowatzyk	-
Home Address:	938 Sunbonnet Loop, San Jose, CA 95125	_
Post Office Address:	Same as above	_
Citizenship:	GERMANY	_
Inventor's Signature:	A. Warrateuff Date: 5-2	6-200

06-19-2001

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Docket No. 18973-53 (P00-3165)	PATENTS ONL	•		o 2
To the Hon. Commissioner of Patents & T			inal documents or conv th	ereof * C
1. Name of conveying party(ies):			of receiving party(ies):	2
Luiz Andre Barroso, Kourosh Gharachorloo and		Name and address	or receiving party (les).	- E
		Name: Comp	ag Computer Corporation	200
Nowatzyk 66/08	(0)			25
Additional name of conveying party attached? ☐ Yes ☑ N	0	Internal Address:_		<u> </u>
3. Nature of conveyance:		Street Address:	P.O. Box 69200	
☑ Assignment ☐ Merger			20555 SH 249	•
☐ Security Agreement ☐ Change of N	ame			
Other:		City: Houston	State: Texas ZIP:	77070-2698
Execution Date: May 15, 2001, May 26,	2001	Additional name(s) and	address(es) attached?	ZI No
4. Application number(s) or patent numbers:				
If this document is being filed together with a ne	ew application, the exe	cution date of the a	oplication is:June	8, 2001
A. Patent Application No.(s)	B.	Patent No.(s)		
	tional numbers attached?			
Name and address party to whom corresponden document should be mailed:		Total number of apparents involved:	plications and	1
Name: Leah Sherry, Esq.	7.	Total fee (37 CFR 3	3.41)	\$40.00
Internal Address: Oppenheimer, Wolff & Donne	elly, LLP	☑ Enclosed		
Street Address: 1400 Page Mill Road		☑ Any discrepan charged to depo	cy or overpayment is au	thorized to be
City: Palo Alto State: California ZIP: 942	304-1124			
	8.	Deposit Account nu	mber:	
		02-3964 (Attach duplicate copy o	f this page if paying by deposit a	ccount)
*	OO NOT USE THIS	SPACE		
9. Statement and signature.	22			
To the best of my knowledge and belief, the foreg original document.	roing information is tr	ue and correct and a	any attached copy is a true	copy of the
	SIL			
Leah Sherry, Reg. No. 43,918	John J.		June 8, 2001	
Name of Person Signing	Signature ages including cover s	heet, attachments, ar	Date	
				

1.4/E601 MRELETE1 00000010 09877530

FD:581

40.00 GP

ASSIGNMENT

WHEREAS, We, Luiz Andre Barroso, Kourosh Gharachorloo and Andreas Nowatzyk, are joint inventors of Method and System for Exclusive Two-Level Caching in a Chip-Multiprocessor application for United States Letters Patent which is executed of even date herewith; and

WHEREAS, COMPAQ COMPUTER CORPORATION, a corporation created and existing under and by virtue of the laws of the State of Delaware, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby sell, assign, transfer and set over to COMPAQ COMPUTER CORPORATION, all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent, and any and all divisions, continuations, and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by COMPAQ COMPUTER CORPORATION for its own use and benefit, and for the use and benefit of its successors, assigns, or other legal representatives to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application and from any and all divisions, continuations, and reissues thereof, to COMPAQ COMPUTER CORPORATION, as assignee of our entire interest, and hereby covenant that we have the full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith.

And we further hereby covenant and agree that we will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to COMPAQ COMPUTER CORPORATION, its successors, assigns, or other legal representatives and that if COMPAQ COMPUTER CORPORATION, its successors, assigns or other legal representative shall desire to file any divisional or continuation applications or to secure a reissued of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional or continuation application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

And we do further covenant and agree that we will, at any time upon request, communicate to COMPAQ COMPUTER CORPORATION, its successors, assigns or other legal representatives, such facts relating to said invention and Letters Patent or the file history thereof

as may be known to us, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

Inventor's Signature:	hAR_	Date: <u>5-15-2001</u>
Typed Name:	Luiz Andre Barroso	
Home Address:	1980 California Street, #20, Mountain View, CA 9	4040
Citizenship:	BRAZIL	
		•
Inventor's Signature:	Jours Juntolo	Date: 5-15-201
Typed Name:	Kourosh Gharachorloo	
Home Address:	2260 Camino A Los Cerros, Menlo Park, CA 9402	5
Citizenship:	IRAN	,
Inventor's Signature:		Date:
Typed Name:	Andreas Nowatzyk	
Home Address:	938 Sunbonnet Loop, San Jose, CA 95125	
Citizenship:	GERMANY	

	NOTARIAL CERTIFICATE
STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CLARA)

On May 15, 2001 before me, Christine Subjects, a notary public, personally appeared Luz Prove Barroso personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public Sulutar

SEAL



STATE OF CALIFORNIA

NOTARIAL	CERTIFICATE
)	

) ss.

COUNTY OF SANTA CLARA

on <u>May 15, 2001</u> before me, <u>Christian Subjects</u>, a notary public, personally appeared <u>Koursh GranaChorloo</u> personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is are subscribed to the within instrument and acknowledged to me that he she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Christine Lebeld
Notary Public

SEAL



as may be known to us, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

Inventor's Signature:	Date:		
Typed Name: Home Address: Citizenship:	Luiz Andre Barroso 1980 California Street, #20, Mountain View, CA 94040 BRAZIL		
Inventor's Signature: Typed Name: Home Address: Citizenship:	Kourosh Gharachorloo 2260 Camino A Los Cerros, Menlo Park, CA 94025 IRAN		
Inventor's Signature Typed Name: Home Address: Citizenship:	Andreas Nowatzyk 938 Sunbonnet Loop. San Jose. CA 95125 GERMANY		

	NOTARIAL CE	RIFICALE	
STATE OF CALIFORNIA)		
COUNTY OF SANTA CLAR) ss. A)		
On 26 May 200 public, personally appeared proved to me on the basis of subscribed to the within instruin his/her/their authorized cap the person(s), or the entity upo	satisfactory eviden ment and acknowled acity (ies) , and that	ce) to be the person(s) who dged to me that he/ she/they e by his/ her/their signature(s) c	se name(s) 1s/are xecuted the same on the instrument
WITNESS my hand an	d official seal.		
SEAL Santa	K. NIGAM ission # 1295560 Public - California & Clara County	Notary Public	